The following is a guide to installing the software; advanced users can adapt this procedure as required.

### Important notes:

- The install script provided performs certain steps based on typical Android devices.

  Given the potential risk of executing incorrect commands as a root user you should check that the steps this scripts takes are valid for your device. If you are unsure you should review the script and execute the commands contained one at a time.
- Touch-Base utilises virus detection software on all of our systems but recipients of the software should pass the files through their own virus checking software before proceeding with installation.

Prior to installing; the delivered install package must be copied to a suitable location on the target device. The location must be on a file system that supports the Linux execute access permission. Specifically this means that location on an SD card cannot be used.

The location '/data/data/updd\_install' is suggested and the rest of this guide assumes this location.

If you know how to create this folder and copy the install package to it; then simply do this and skip to the <u>installation section</u>.

The following sections describe some typical ways you might copy the install package to the correct location.

#### Load directly from web:

This method requires that you have internet connection to the device and have some method to transfer the installation package.

In the example below we use the <u>curl utility</u> to transfer the file.

If you can satisfy both these requirements then this is probably the easiest method.

1. Open your terminal emulator.

- 2. Enter the command "su" to gain root privileges.
  - You will need to have "rooted" your device to allow this.
  - It is important to take care when working as superuser as you can damage the system with incorrect commands.
- 3. Create and navigate to a temporary install folder using the commands

```
mkdir /data/data/updd_install
cd /data/data/updd_install
```

4. Download the file

curl http://xxxxxxxx.armeabi\_v7a-06\_00\_NNNN.tar > android.tar

• if 'curl: not found' is issued then curl is not available and you will need to use an alternate method to transfer the installation package.

## Load from a USB pen drive:

- 1. Copy the delivered file to a USB stick.
- 2. Plug the stick into the Android device.
- 3. Open your terminal emulator.
- 4. Enter the command "su" to gain superuser privileges.
  - You will have needed to "root" your device to allow this.
  - It is important to take care when working as superuser as you can damage the system with incorrect commands.
- 5. Navigate to the usb drive using the command

cd /mnt/media/<drive name>

- If you type "cd /mnt/media/" then hit the TAB key Android will list the available options, typically pick one starting USB. If you type the first few letters of the name and hit TAB again Android will complete this for you.
- 6. Copy installation package to a temporary install folder using the commands

```
mkdir -p /data/data/updd_install
```

cp <delivered file name>.tar /data/data/updd\_install/android.tar

#### **Installation**

At this stage you should have a folder /data/data/updd\_install containing your install package and a terminal window open

Execute the following commands

su

cd /data/data/updd\_install

tar -xf \*

At this point you will need to execute the installation step. As stated in the important note at the top of this article you can either examine the content of the install script, e.g. with the command:

cat install.sh

and execute each step; amending where appropriate

or execute the script with the command

./install.sh

#### **Install script summary**

The install script performs the following actions:

- 1. Sets the file system to be writable.
- 2. Creates the folder /system/vendor/updd
- 3. Copies the driver and related files to /system/vendor/updd
- 4. Marks the executable files updd and upddutils executable
- 5. Creates the folder /system/vendor/updd/usrlib
- 6. Copies the associated library files to /system/vendor/updd/usrlib and /system/vendor/updd/qt
- 7. Installs the device definition scripts to /system/usr/idc
- 8. Creates the folder /data/data/updd
- 9. Creates a backup of /init.rc as /system/vendor/updd/init.rc.orig
- 10. Sets the file system back to read only.
- 11. It might be useful to refer to the diagnostics section at this point to check that all embedded components are working as expected,

## Finally...

In order to use the driver the integrator must arrange for the process to be launched at startup as described in the <u>Driver Execution</u> section.

Touch-Base Support

http://support.touch-base.com/Documentation/50477/Installation